

Testimony on the A. Q. Khan Network

By

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Committee

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Mr. Chairman:

My name is Leonard Weiss. I am a researcher and writer on energy and nuclear nonproliferation issues and a consultant to the Center for Global Security Research at the Lawrence Livermore National Laboratory. My testimony is on behalf only of myself and no client, organization, or institution.

Some Legislative History Concerning Pakistan

For over twenty years I worked on Capitol Hill for Senator John Glenn (D-OH) as his staff director on the Senate Governmental Affairs Committee and its subcommittee on Energy and Nuclear Proliferation. During that period I wrote legislation for Senator Glenn that became the Nuclear Nonproliferation Act of 1978 and also the so-called Glenn amendment to the Foreign Assistance Act of 1961. The Glenn Amendment barred economic and military assistance to any country that imported or exported reprocessing equipment, materials, or technology, and was invoked against Pakistan by the Carter Administration in 1977. In 1978, the Symington Amendment, which barred similar assistance to any country that imported or exported unsafeguarded enrichment equipment, materials, or technology, was also invoked against Pakistan. Both cutoffs were the result of French-Pakistani deals that were subsequently cancelled, but not before considerable technology had been transferred. The Symington and Glenn amendments made the procurement of nuclear-related components and equipment riskier for Pakistan than before, but events coupled with bad U.S. policy in the 80s conspired to limit that risk

As a result Pakistan was able to reap the fruits of the supply network that A. Q. Khan helped create following his return from the Netherlands with stolen blueprints and lists of suppliers for constructing a nuclear enrichment facility based on centrifuge technology.

U.S. Policy toward Pakistan and the Rise of the Khan Network

Mr. Chairman, one cannot separate the success of the Khan network in the 80s from the

policies toward Pakistan pursued by the United States. The Glenn and Symington Amendments were both waived by administrative and Congressional action respectively after the Soviet invasion of Afghanistan. In order to help the Afghani Mujaheddin fight the Soviets, we arranged for the CIA to provide them with sophisticated arms delivered through the Pakistan Intelligence Service (ISI). The Mujaheddin contained a group of murderous thugs that included the Taliban and foreign jihadists organized and initially funded by Osama bin Laden. It is not an exaggeration to say that our assistance to the mujaheddin aided the rise of Al Qaeda. Pakistan's reward for its assistance was shipments of U.S. arms and F-16s, most of which were deployed near the border with India rather than where the Soviets might have attacked.

The lifting of sanctions against the Pakistanis coupled with a \$3.2 billion aid package sent them the message that they could continue their nuclear weapon acquisition activities with the U.S. government doing little to stand in their way as long as they continued funneling assistance to the Mujaheddin and did not embarrass us by setting off a nuclear explosion. That message helped embolden Pakistan to widen the Khan network and set off a new round of attempts on their part to get nuclear-related materials and components from other countries, including those with relatively tight export controls like the United States and Canada. Let me mention a few examples.

The Khan Network and Smuggling in the U.S.

In 1981, while the aid package was going through the legislative process, Pakistan attempted to smuggle 5,000 lbs. of zirconium, used for nuclear reactor fuel rods, out of the U.S. The shipment, marked as "mountaineering equipment", was stopped by U.S. Customs agents. It had no effect on Congressional passage of the aid package.

In 1984, a man named Nazir Ahmed Vaid was arrested for illegally attempting to export krytrons, which are used for nuclear triggers. Although the known intended recipient was the Pakistan Atomic Energy Commission, the indictment was rewritten to exclude any mention of the nuclear use of krytrons. Vaid was permitted to plea bargain to a reduced offense, thus avoiding a jury trial, and a gag order on the case was issued by the judge. He was found guilty of one count of export violation and quietly deported three weeks later.

Although this case had no effect on U.S. aid to Pakistan, it did cause the Congress to pass, in 1985, the Solarz Amendment to the Foreign Assistance Act, which prohibited military and economic assistance to any country that illegally exports or attempts to export U.S. items that would contribute significantly to the ability of that country to make a nuclear explosive device.

On the same day the Solarz Amendment was enacted, the Pressler Amendment was signed into law. The Pressler Amendment made continued military assistance to Pakistan contingent on an annual certification by the President that Pakistan did not possess a nuclear explosive device. It also required the President to certify that the U.S. assistance being given to Pakistan would significantly reduce the risk of Pakistan's possession of

such a device, but the Reagan Administration ignored this requirement, realizing that the clear evidence of Pakistan's ongoing drive for the bomb meant they would have to halt assistance. This misfeasance was explained by falsely claiming that there was no difference in the two requirements in the Pressler Amendment. Congress chose not to challenge the Administration on this failure to carry out the law.

In any case, the passage of the Solarz and Pressler Amendments made no difference to the activities of Pakistan and A. Q. Khan. In 1987, a Canadian citizen of Pakistani extraction, named Arshed Pervez, was arrested for illegally attempting to buy and export a quantity of beryllium (used as a reflector in the core of nuclear weapons), along with 25 tons of maraging steel (a special steel used for constructing high-speed centrifuges) from an American manufacturer. He was convicted of the beryllium charge and of lying to investigators, but escaped conviction on the remaining charges on the grounds of entrapment, even though American intelligence officials found evidence that he was working for a retired Pakistani brigadier general and that the final customer was the Pakistani nuclear program. This was a clear violation of the Solarz Amendment, but no sanction ensued.

There may or may not have been an explicit connection, but it was around this time that A. Q. Khan had made arrangements with Iran to transfer centrifuge technology for Iran's clandestine work on uranium enrichment.

The Khan Network Reverses the Flow of Nuclear Materiel

Pakistan had the bomb by 1987, but the Reagan and the Bush I Administrations continued to make the determination that Pakistan did not possess a nuclear explosive device until 1990, when the last Soviet soldiers were leaving Afghanistan. But the military cutoff that ensued did not slow the activities of the Khan network. Now that Pakistan had the bomb and the means to produce fissile material, A. Q. Khan could embark on a stated mission to help other Islamic countries obtain nuclear weapons while enriching himself and continuing to obtain needed materials and components for the ongoing Pakistani weapon program.

Our intelligence agencies, although they had been tracking Khan's activities since the 80s, including intercepting communications going to and from some of the companies involved with the Khan network, claim to have been unaware that Khan had reversed the flow of nuclear trade involving Pakistan. This was not the first stumble of U.S. intelligence with respect to A. Q. Khan. According to former Dutch Premier Ruud Lubbers, the Netherlands government was prepared to arrest Khan in 1975 when he was caught spying at the Urenco enrichment facility in Almelo, but the CIA asked the Dutch government to let him go so that more information about his activities could be obtained. That allowed Khan to go on to a career in Pakistan that resulted in Pakistan manufacturing nuclear weapons, which made him a national hero whose birthday is celebrated in Mosques.

In any case, Khan began bringing Iranian scientists to Pakistan in 1988 for training in

centrifuge enrichment technology and began issuing advertising brochures touting his laboratory's centrifuge-related equipment for sale. This brought a flood of responses. Khan must have realized that he could use the network he had created for Pakistan's own program to sell nuclear weapon-related technology to other proliferating countries, and so he began using the middlemen in the Pakistani effort to send nuclear parts and supplies elsewhere. He even included bomb design in at least one instance (Libya), and probably others. He is known to have made at least 13 visits to North Korea, which probably included trade in missiles as well as nuclear technology since his laboratory was involved in the development of both technologies. Pakistan's President Musharraf has admitted that Khan delivered centrifuges to North Korea for nuclear enrichment purposes. While all of this was going on, Pakistan was preparing for a series of nuclear tests in response to those of India.

Pakistan Escapes Sanctions (Again)

Pakistan's nuclear tests in 1998, triggered additional and severe economic sanctions, which were removed via Congressional action in order to prevent what some predicted would be an economic collapse and serious political instability. The removal of the additional sanctions were unaccompanied by any demand that Pakistan's nuclear activity be cut back.

The military embargo on Pakistan lasted until after the 9/11 attack, and the need to go after Al Qaeda and bin Laden, whose headquarters was located in Afghanistan and protected by the Taliban. Musharraf was pressured to cooperate with the U.S. in removing the Taliban government (that he had helped install) by military force. He did so, and in return, all sanctions against Pakistan stemming from its nuclear program were removed. In addition, President Bush proposed a new aid program, including the sale of another batch of F-16s, and named Pakistan a "Major Non-NATO Ally".

Libya Trips up A. Q. Khan

Meanwhile, the Khan network's smooth operation hit a giant sized bump when, in 2003, a shipment of components for 1,000 high speed centrifuges that left Italy bound for Libya was seized on the high seas, and its cargo confiscated. As a result of the ensuing scandal, Libya, which had been dealing with the Khan network for years, decided to give up its nuclear program and cooperate with investigators in exposing all the elements of the Khan network it had been dealing with. The contraband shipment also included a nuclear weapon design that appeared to be the same one provided to Pakistan by China in 1983. A number of individuals who had been acting as middlemen in various countries were arrested and the first trial is about to begin in Germany.

The Libyan exposure put President Musharraf in a particularly difficult position, considering all the prevarications he had been issuing for years about Pakistan's nuclear activities, and so he responded by stripping A. Q. Khan of his official duties and placing him under house arrest, but pardoning him at the same time. Eleven associates of Khan at the Khan Research Laboratories were arrested at the same time, but the official line from

President Musharraf is that the Khan network was and is a “rogue” operation carried out by A. Q. Khan with no involvement by the government or the military.

On the other hand, Musharraf has refused to make Khan available for interrogation by the U.S. or by the IAEA. It is known that he and his associates visited Syria, Saudi Arabia, Egypt, Chad, Mali, Nigeria, Niger, and Sudan. Some information has been passed from Musharraf to the U.S. based on Pakistani debriefings of Khan, but neither Pakistan nor the Bush Administration have made any public statements about what Khan may have said. There is one report of a briefing given to Pakistani journalists on February 1, 2004, by Lieutenant General Khalid Kidwai, Commander of Pakistan’s Strategic Planning and Development Cell. In this briefing General Kidwai is reported to have said that A. Q. Khan signed a 12 page confession in which he admitted to providing Iran, Libya, and North Korea with technical assistance and high speed centrifuges for nuclear enrichment. Khan also supposedly said that he had the approval of then-army chief Aslan Beg to assist Iran and had support for his North Korean deals from two other former army chiefs, one of whom is currently the Pakistani Ambassador to the United States. None of this is verifiable without an independent investigation involving interviews with Khan himself.

What is the status of the Khan network today?

At the Third Asia Security Conference in Singapore on June 5, 2004, Secretary of Defense Donald Rumsfeld said he was confident that “the network has been dismantled.” In a CNN interview that took place on October 3, 2004, Secretary of State Condoleezza Rice said, “The important thing is that the A. Q. Khan network is out of business, and people are being brought to justice.”

Well, it is true that some people are being brought to justice, but A. Q. Khan can’t be said to be one of them. His retirement to his multi-million dollar villa does not exactly constitute an appropriate sentence for his spreading the bomb to some of the worst governments on earth.

The Case of Asher Karni and Humayun Khan

More important, at least some parts of the network are definitely still functioning. In 2004, a South African electronics salesman and former Israeli army major named Asher Karni was arrested for violating export control laws in the illegal shipment of oscilloscopes and spark gap triggers to Pakistan from the U.S. via South Africa. The ultimate destination was a company described by U.S. officials as a front for Pakistan’s nuclear weapon program. The records for the case have been sealed by a federal judge who imposed a gag order on all participants. When federal investigators asked for State Department permission to go to Pakistan to interrogate the head of the company, a man named Humayun Khan, permission was denied. Humayun Khan has been linked with several militant Islamic groups, including one that supports fighters in Kashmir. Asher Karni was ultimately convicted and is serving a three year prison sentence, but Humayun Khan, who was indicted, is scot free in Pakistan at this time. In my view, Mr. Chairman, this was another case of a violation of the Solarz Amendment that is being ignored by the

Bush Administration because it wants Musharraf's help in the war on terror.

To What Extent Has the Khan Network Been Rolled Up?

In judging the likelihood of whether the Khan network has been rolled up with no replacement of lost nodes, it is useful to recall that the Pakistani nuclear effort did not begin with A. Q. Khan. The effort began with then-Prime Minister Bhutto's famous meeting at Multan in 1972 where the decision to go for the bomb was made. That resulted in some high level resignations at the Pakistan Atomic Energy Commission (PAEC), including that of Nobel Prize winner Abdus Salam who was opposed to the weapons project. The PAEC directorship was then given to Munir Khan under whom A. Q. Khan briefly worked. The PAEC was to be the locus of bomb design and research. Obtaining foreign assistance was the responsibility of the ISI. It had set up a division for the clandestine procurement of military nuclear technology from abroad, including missile technology as well as nuclear. A. Q. Khan took over the nuclear enrichment project after his return from the Netherlands, although not without a bureaucratic struggle with Munir Khan. A. Q. Khan won that bureaucratic battle, and his success in producing a working centrifuge enrichment plant brought him power and fame in Pakistan. But he did not work alone. Khan Research Laboratories at Kahuta is the size of a small city, and there are large numbers of scientists and engineers working there who, with the assistance of the PAEC and ISI can carry out the work that Khan has been heading for all these years. And they have reason to be motivated.

Pakistan is still not self-sufficient in building nuclear weapons. It still needs specialized materials for the weapons themselves and for the production of fissile material for the weapons. There is no evidence that the arrests in conjunction with the revelations by Libya have shut down the network. Just last week, the Guardian, a British newspaper, reported on the existence of a July, 2005 document prepared by British, French, German, and Belgian intelligence agencies for the European Union, that said the Pakistanis were still shopping in Europe for such things as high-grade aluminum tubing for centrifuges, ring magnets for centrifuge rotors, and machine tools, chemicals, and equipment for producing liquid- and solid-fueled missiles. The document lists 20 Pakistani government offices, laboratories, companies, and trading organizations active in the procurement effort for the bomb program, and hundreds of companies around the world that are said to be involved in some aspect of the production of weapons of mass destruction. To this should be added the disturbing information that investigators have been unable to account for all the equipment the Libyans purchased from the Khan network, as well as hundreds of millions of dollars worth of high tech equipment for military purposes that went to Sudan during the period that Khan was known to have visited that country.

The bottom line, Mr. Chairman, is that we don't really know to what extent the Khan network has been rolled up, to what extent new additions to the network have been made, and whether increased surveillance of Pakistani nuclear activity is making much of a difference. But an educated guess based on the unclassified literature is that a good part of the network is still intact, and that additions to it are being actively sought. To help

deal with this situation requires more information from the Pakistanis themselves.

Public statements made by former CIA Director Porter Goss and others suggest we haven't yet learned what we need to know from General Musharraf, who continues to deny the U.S. and the IAEA access to A. Q. Khan. And we do not appear to be putting sufficient pressure on him.

U.S. Policy Risks Further Problems

We seem to have sold our souls to the Pakistanis again, this time to help us with Al Qaeda instead of the Soviets, and I fear we are once again getting the bad end of the deal. Bin Laden is still at large, the Taliban-led insurgency in Afghanistan is growing in strength, and much of what we thought we had accomplished in Afghanistan after 9-11 is in serious jeopardy.

Meanwhile, we have signed a nuclear agreement with India that is motivating Pakistan to increase its nuclear arsenal, which means it will need additional assistance from outside. It may get some from China, and it will be seeking help from the network that has helped it in the past. We cannot afford to be complacent about this. In the meantime, helping Pakistan to rejuvenate its F-16 fleet makes little sense. Pakistan violated the terms of the sale of F-16s in the 80s when it allowed China to examine the plane, and when it altered the plane's configuration in order to allow the carrying of nuclear warheads. There is no reason to assume the same thing won't happen again.

Mr. Chairman, one cannot stop proliferation without having and enforcing rules by which all must live. Letting countries we consider friends to make nuclear weapons, and reserving our power only to try to prevent those who are not our friends from making such weapons is a prescription for ultimate failure. We failed to stop the Pakistanis and failed to roll up the Khan network when it was possible to do so. We now face an increased risk of nuclear weapons and nuclear materials falling into the hands of radical jihadist elements that exist in Pakistan. Providing more incentives for Pakistan to make more weapons does not seem to me to make logical sense.

Preventing Future Khan-like Networks

But Pakistan should not be seen as the be-all and end-all of proliferation networks. As long as there are countries and sub-national groups seeking nuclear weapons there will be attempts at bypassing export regulations, and we must be prepared for the possibility of Khan-like networks springing up in the future. How can we prevent this?

First, it is important to make export regulations as tight as possible worldwide and with severe penalties for violations. The UN has taken a step in this direction with the passage of UNSC 1540, which obligates all UN members to "refrain from providing any form of support to non-state actors that attempt to develop, acquire, manufacture, possess, transport, transfer, or use" WMD and their means of delivery. In so doing, states are to

put in place “appropriate effective” laws to carry out the aforementioned obligation. That means effective export controls, security and accounting, border controls, and criminal laws. A committee to monitor implementation has been formed, but this will be a multi-year effort requiring large amounts of funding to bring countries to the point where a global system, based on appropriate uniform standards, exists that is sufficiently robust to prevent another Khan network from operating effectively.

In addition, a global intelligence operation is a basic requirement if there is to be a proactive approach to stopping proliferators and Khan-like networks from reaching their goals. Much cooperation is already going on, and this should be encouraged and expanded. Without good global intelligence, programs of interdiction of contraband, as exemplified by the Bush Administration’s Proliferation Security Initiative, cannot be effective.

Finally, Mr. Chairman, the history of our relations with countries like Iran and Pakistan should tell us that actions to achieve short-term foreign policy goals must not overwhelm the need to understand and consider the longer term risks and consequences of such actions. In the end, nonproliferation and counter-terrorism policies are intertwined, and it is a mistake to trade off one policy principle for the other. History tells us that today’s enemy can be tomorrow’s friend and vice versa. In general, U.S. national security is best served by following policies that are least likely to result in the creation of either proliferators or terrorists, regardless of whose side we think they will be on.

Thank you, Mr. Chairman. I am ready to answer any questions.